

With respect to the species of *Cyanocitta* which I supposed to be new, and which I denominated *C. superciliosa*, the synonyms quoted in Mr. Gray's work under *C. ultramarina* have induced me to consult the 'Zoology of Capt. Beechey's Voyage,' and I there find the species in question figured and described by Mr. Vigors under the name of *Garrulus californicus*. The distinctions between it and *C. ultramarina* of Mexico (*Garrulus sordidus*, Swains.) are there correctly pointed out, although all subsequent authors have continued to unite these two species. My proposed specific name of *superciliosa* must therefore give way to Mr. Vigors's prior appellation of *californica*, and the extreme difficulty of obtaining ready access to every zoological work must be my apology for having added one more to the *ten* or *twelve thousand* superfluous specific synonyms which already exist in ornithology alone.

I may add that the "*Pica Sieberi*" of Wagler is certainly a synonym of *C. ultramarina*, not a distinct species as Mr. Gray makes it.

L.—*Note on Mr. H. E. Strickland's Paper on the genus Cardinia (Agassiz).* By CAPT. PORTLOCK, R.E.

Corfu, March 11, 1845.

THE paper of Mr. Strickland\* contains this passage: "Some authors have been disposed to extend the geological range of this genus, by including in it those species from the coal-measures which Sowerby and most other palæontologists have regarded as true *Unionidæ*. Whether Agassiz originally proposed this extension of the genus I am not aware, having never yet been able to meet with his translation of the 'Mineral Conchology,' in which the group is first defined; but in his last work on the subject, the 'Etudes critiques sur les Mollusques fossiles,' he seems to regard *Cardinia* as exclusively confined to the lias and lower oolite."

Having before me the German translation by Agassiz of the 'Mineral Conchology,' I am enabled to remove this doubt of Mr. Strickland, and to render his history of the new genus *Cardinia* complete.

To the generic description of the genus *Unio* (plate 33, Min. Conch.) Sowerby appended this remark: "Several species of this genus are abundant in the iron-stone bed of Derbyshire, called the mussel-band," &c.; and at this passage occurs Agassiz' first note upon the subject, the words of which are: "These bivalves from the stone-coal formation which have been classed by Sowerby in the genus *Unio* are very different from it, as I have satisfied my-

\* Annals, vol. xiv. p. 100.

self by a careful comparison of the casts of several living species of the genus *Unio* with the fossil species of the stone-coal. The internal casts of the true *Uniones* have, like *Trigonia*, a strong anterior notch, and along the upper margin the impression of the hinge-teeth is distinctly visible. In the fossil casts from the stone-coal there are, on the contrary, two oblique furrows, the one anterior, the other posterior, which can only have originated from widely separated hinge-teeth. I think that they would be better placed in my genus *Cardinia*, which I have established from a liassic species of the same type."

Again, under *Unio acutus*, pl. 33. fig. 5, 6, 7, Sowerby states that he had satisfied himself of the identity of the fossil with the living genus *Unio*, by comparing a cast of the latter with several fossil casts; and the note of Agassiz upon this statement is as follows:—

"What Sowerby here states of the generic identity of the so-called *Uniones* from the stone-coal formation with the species now living in fresh water, merely proves that he recognised in the casts both the principal characteristics of all elongated bivalves provided with oblong hinge-teeth. But he has not thereby taken into account the great difference which the impression itself of these teeth on the casts shows." In referring to *Unio crassissimus*, *U. Listeri* and *U. hybridus*, the first of which is stated by Sowerby to possess peculiarities in the great thickness of its shell and the tile-like structure of its surface, which might perhaps be elevated into generic characters, Agassiz remarks, "These three species belong to my genus *Cardinia*; see the preceding note, and my 'Etudes critiques sur les Mollusques fossiles.'"

*Unio crassiusculus*, pl. 185, and *U. concinnus*, pl. 223, are also referred to *Cardinia*; but *U. Solandri*, pl. 517, and the several *Uniones* figured in pls. 594 and 595, are stated by Agassiz to belong principally to his new genus *Pleuromya*, for which he, as before, refers the reader to 'Etudes critiques sur les Mollusques fossiles.'

From these extracts then it is quite evident that Agassiz did extend his genus *Cardinia* to the species of the coal as well as to those of the lias, but whether he was correct in so doing can scarcely be determined from the notes in question, as the actual definition of the genus *Cardinia* is not given in them. This deficiency Mr. Strickland can doubtless supply, and by placing the characters of the several genera here alluded to in comparison with each other, determine whether the shells of the coal formation can be classed in the genus *Cardinia*, or should form the type of another new genus.